DELTA SIGMA MODULATOR WITH INTEGRAL DECIMATION

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ABSTRACT OF THE DISCLOSURE

(34) A digital signal processing system utilizes an internal filter of a delta-sigma modulator in a novel manner to implement both the integration functions of the delta-sigma modulator and a decimation function. Using the internal filter to combine integration and decimation functions can eliminate the need for a separate decimation filter. The combination of integration and decimation functions can also improve signal-to-noise ratio by improving low-pass filtering performance.